

Curriculum Vitae

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- EDUCATION:
- Ph.D. Physical Oceanography 1989
University of Washington
- B.A. Mathematics 1982
San Francisco State University
- PRESENT POSITIONS:
- Oceanographer
(1991 - 1995 GS-13; 1995 - 2001 GS-14; Present: GS-15)
Ocean Climate Research Division
Pacific Marine Environmental Laboratory
NOAA, U.S. Dept. of Commerce
- Affiliate Professor of Oceanography
School of Oceanography, University of Washington
- PREVIOUS POSITIONS:
- Postdoctoral Investigator (Sep 89 - May 91)
Department of Physical Oceanography
Woods Hole Oceanographic Institution
- Postdoctoral Associate (Mar 89 - Aug 89)
Joint Institute for the Study of the Atmosphere and Ocean
University of Washington
- Graduate Research Assistant (Sep 83 - Feb 89)
School of Oceanography
University of Washington
- RECENT SERVICE:
- International CLIVAR Ocean Observations Panel
U.S. CLIVAR Scientific Steering Committee (1998-2003)
U.S. CLIVAR Pacific Implementation Panel
Associate Editor, JGR-Oceans
- FELLOWSHIPS:
- Egdvedt Fellowship, University of Washington (1982-83)
Frohlich Fellowship, CSIRO Marine Laboratory
Hobart, Australia (2002)
Post Rouge, Institut de Recherche pour le Développment
Nouméa, New Caledonia (2004)

REFEREED JOURNAL PUBLICATIONS:

- Kessler, W.S. (2004a): The circulation of the eastern tropical Pacific: A review. *Prog.Oceanogr.*, submitted.
- Kessler, W.S. (2004b): Intraseasonal Variability in the Oceans. In "Intraseasonal variability of the Atmosphere-Ocean System". W.K.M. Lau and D.E. Waliser, Eds. Praxis Publishing., submitted.
- Lyman, J.M., G.C. Johnson and W.S. Kessler, 2004: Structure of 17-day versus 33-day tropical instability waves in the equatorial Pacific. *J.Phys.Oceanogr.*, submitted.
- Kessler, W.S., G.C. Johnson and D.W. Moore, 2003: Sverdrup and nonlinear dynamics of the Pacific South Equatorial Current. *J.Phys.Oceanogr.*, 33(5), 994-1008.
- Sloyan, B.S., G.C. Johnson and W.S. Kessler, 2002: The Pacific cold tongue: An indicator of hemispheric exchange. *J.Phys.Oceanogr.*, 33(5) 1027-1043.
- Kessler, W.S., 2002: Is ENSO a cycle or a series of events? *Geophys.Res.Lett.*, 29(23), 2125, doi:10.1029/2002GL015924, 2002.
- Kessler, W.S., 2002: Mean three-dimensional circulation in the northeast tropical Pacific. *J.Phys.Oceanogr.*, 32, 2457-2471.
- Johnson, C.G., B.M. Sloyan, W.S. Kessler and K.E. McTaggart, 2002: Direct measurements of upper ocean currents and water properties across the tropical Pacific Ocean during the 1990's. *Prog.Oceanogr.*, 52, 31-61.
- Cronin, M.F. and W.S. Kessler, 2002: Seasonal and interannual modulation of mixed layer variability at 0°, 110°W. *Deep-Sea Res. I*, 49, 1-17.
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- Yu, Z., J.P. McCreary, W.S. Kessler and K.A. Kelly, 2000: Influence of equatorial dynamics on the Pacific North Equatorial Countercurrent. *J.Phys.Oceanogr.*, 30, 3179-3190.
- Kessler, W.S. and R. Kleeman, 2000: Rectification of the Madden-Julian Oscillation into the ENSO cycle. *J.Climate*, 13, 3560-3575.
- Kessler, W.S., 1999: Interannual variability in the subsurface high-salinity tongue south of the equator at 165°E. *J.Phys.Oceanogr.*, 29, 2038-2049.
- Kessler, W.S., L.M. Rothstein and D. Chen, 1998: The annual cycle of SST in the eastern tropical Pacific, diagnosed in an ocean GCM. *J.Climate*, 11, 777-799.
- Moore, D.W., R.C. Kloosterziel and W.S. Kessler, 1998. The evolution of mixed Rossby-gravity waves. *J.Geophys.Res.*, 103, 5331-5346.
- Kessler, W.S., M.C. Spillane, D.E. Harrison and M.J. McPhaden, 1996: Scales of variability in the equatorial Pacific inferred from the TAO buoy array. *J.Climate*, 9, 2999-3024.
- Kessler, W.S. and M.J. McPhaden, 1995a: Oceanic equatorial waves and the 1991-93 El Niño. *J. Climate*, 8, 1757-1774.
- Kessler, W.S. and M.J. McPhaden, 1995b: The 1991-93 El Niño in the central Pacific. *Deep-Sea Res II*, 42, 295-333.
- Kessler, W.S., M.J. McPhaden and K.M. Weickmann, 1995: Forcing of intraseasonal Kelvin waves in the equatorial Pacific. *J. Geophys. Res (Oceans)*, C100, 10,613-10,631.
- Kessler, W.S. and J.P. McCreary, 1993: The annual wind-driven Rossby wave in the subthermocline equatorial Pacific. *J. Phys. Oceanogr.*, 23, 1192-1207.

REFEREED JOURNAL PUBLICATIONS (CONTINUED):

- Kessler, W.S., 1991: Can reflected extra-equatorial Rossby waves drive ENSO? *J. Phys. Oceanogr.*, **21**, 444-452.
- Taft, B.A. and W.S. Kessler, 1991: Variations of zonal currents in the central tropical Pacific during 1970 to 1987: Sea level and dynamic height measurements. *J. Geophys. Res.*, **96**, 12599-12618.
- Kessler, W.S., 1990: Observations of long Rossby waves in the northern tropical Pacific. *J. Geophys. Res.*, **95**, 5183-5217.
- Harrison, D.E., W.S. Kessler and B.S. Giese, 1989: Ocean circulation model hindcasts of the 1982-83 El Niño: Thermal variability along the ship of opportunity tracks. *J. Phys. Oceanogr.*, **19**, 397-419.
- Kessler, W.S. and B.A. Taft, 1987: Dynamic heights and zonal geostrophic transports in the central tropical Pacific during 1979-1985. *J. Phys. Oceanogr.*, **17**, 97-122.

OTHER PUBLICATIONS:

- Kessler, W.S., R.E. Davis, K. Takeuchi and R. Lukas, 2001: The Pacific Basin Extended Climate Study. In: *Observing the Ocean in the 21st Century*, C.J. Koblinsky and N.R. Smith (eds), Bureau of Meteorology, Melbourne, Australia.
- Zhang, C., H.H. Hendon, W.S. Kessler and A.J. Rosati, 2001: A workshop on the MJO and ENSO: Meeting summary. *Bull. Am. Met. Soc.*, **82**(5), 971-976.
- Davis, R.E., W.S. Kessler, R. Lukas and R. Weller, et al., 2000: Implementing the Pacific Basin Extended Climate Study (PBECs). U.S. CLIVAR, 113 pp.
- Lukas, R., R.E. Davis and W.S. Kessler, 1998: Prospectus for a Pacific Basinwide Extended Climate Study. Texas A&M University, 36 pp.
- Kessler, W.S., 1997: El Niño. *Hardy Palm International* (Quarterly journal of the Pacific Northwest Palm and Exotic Plant Society), **32**, 8-12.
- Kessler, W.S., 1989: Observations of long Rossby waves in the northern tropical Pacific. NOAA Technical Memorandum, ERL-PMEL-86, 169 pp.
- Harrison, D.E., W.S. Kessler and B.S. Giese, 1988: Model-data comparisons for the 1982-83 El Niño: the XBT tracks. NOAA Tech. Mem., ERL-PMEL-79, 61 pp.
- Taft, B.A. and W.S. Kessler, 1987: On the effects of salinity on the dynamics of the tropical Pacific circulation. *Trop. Ocean-Atmos. Newslett.*, **41**, 8-10.
- Kessler, W.S., B.A. Taft and M.J. McPhaden, 1985: Assessment of the XBT sampling network in the central Pacific. Univ. Corp. Atmos. Res., US TOGA 4, 62 pp.

GRADUATE STUDENTS:

- Masters committee chair (advisor) for Mr. Shuguang Song, School of Oceanography, University of Washington
- Masters committee for Mr. Steve Goodson, School of Oceanography, University of Washington
- Masters committee for Mr. Gabriel Vecchi, School of Oceanography, University of Washington
- Doctoral committee for Dr. Weimin Wang, School of Oceanography, University of Washington